

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/613, 524A
Source: IFW16
Date Processed by STIC: 7/31/06

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/613,524A

CRF Edit Date: 7/31/06
Edited by: KZ

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

J
___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

27-29

___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other:



IFW16

RAW SEQUENCE LISTING

DATE: 07/31/2006

PATENT APPLICATION: US/10/613,524A

TIME: 15:23:46

Input Set : A:\PTO.txt

Output Set: N:\CRF4\07312006\J613524A.raw

4 <110> APPLICANT: KRIEG, ARTHUR M
 6 <120> TITLE OF INVENTION: NUCLEIC ACID COMPOSITIONS FOR STIMULATING IMMUNE RESPONSES
 8 <130> FILE REFERENCE: C1037.70042US00
 10 <140> CURRENT APPLICATION NUMBER: US 10/613,524A
 11 <141> CURRENT FILING DATE: 2003-07-03
 13 <150> PRIOR APPLICATION NUMBER: US 60/394,091
 14 <151> PRIOR FILING DATE: 2002-07-03
 16 <160> NUMBER OF SEQ ID NOS: 29
 18 <170> SOFTWARE: PatentIn version 3.2
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 21
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Artificial sequence
 25 <220> FEATURE:
 27 <223> OTHER INFORMATION: Oligodeoxynucleotide
 29 <400> SEQUENCE: 1
 30 tcgtcgtttt tcggtcgttt t 21
 33 <210> SEQ ID NO: 2
 34 <211> LENGTH: 24
 35 <212> TYPE: DNA
 36 <213> ORGANISM: Artificial sequence
 38 <220> FEATURE:
 40 <223> OTHER INFORMATION: Oligodeoxynucleotide
 42 <400> SEQUENCE: 2
 43 tcgtcgtttt gtcgttttgt cgtt 24
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 21
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Artificial sequence
 51 <220> FEATURE:
 53 <223> OTHER INFORMATION: Oligodeoxynucleotide
 56 <220> FEATURE:
 57 <221> NAME/KEY: misc_feature
 58 <222> LOCATION: (1)..(12)
 59 <223> OTHER INFORMATION: n is a, c, g, or t
 61 <400> SEQUENCE: 3
 W--> 62 nnnnnnnnnn nnggtcgttt t 21
 65 <210> SEQ ID NO: 4
 66 <211> LENGTH: 9
 67 <212> TYPE: DNA
 68 <213> ORGANISM: Artificial sequence
 70 <220> FEATURE:
 72 <223> OTHER INFORMATION: Oligodeoxynucleotide

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DATE: 07/31/2006

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74 <400> SEQUENCE: 4
75 ggtcggtttt 9
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 21
80 <212> TYPE: DNA
81 <213> ORGANISM: Artificial sequence
83 <220> FEATURE:
85 <223> OTHER INFORMATION: Oligodeoxynucleotide
88 <220> FEATURE:
89 <221> NAME/KEY: misc_feature
90 <222> LOCATION: (13)..(21)
91 <223> OTHER INFORMATION: n is a, c, g, or t
93 <400> SEQUENCE: 5
W--> 94 tcgtcggtttt tcnnnnnnnnn n 21
97 <210> SEQ ID NO: 6
98 <211> LENGTH: 12
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial sequence
102 <220> FEATURE:
104 <223> OTHER INFORMATION: Oligodeoxynucleotide
106 <400> SEQUENCE: 6
107 tcgtcggtttt tc 12
110 <210> SEQ ID NO: 7
111 <211> LENGTH: 20
112 <212> TYPE: DNA
113 <213> ORGANISM: Artificial sequence
115 <220> FEATURE:
117 <223> OTHER INFORMATION: Oligodeoxynucleotide
119 <400> SEQUENCE: 7
120 tcgtcggtttt tcggtcggtt 20
123 <210> SEQ ID NO: 8
124 <211> LENGTH: 19
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Oligodeoxynucleotide
131 <400> SEQUENCE: 8
132 tcgtcggtttt tcggtcggtt 19
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 18
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial sequence
140 <220> FEATURE:
142 <223> OTHER INFORMATION: Oligodeoxynucleotide
144 <400> SEQUENCE: 9
145 tcgtcggtttt tcggtcgt 18
148 <210> SEQ ID NO: 10
149 <211> LENGTH: 17
150 <212> TYPE: DNA

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DATE: 07/31/2006

PATENT APPLICATION: US/10/613,524A

TIME: 15:23:46

Input Set : A:\PTO.txt

Output Set: N:\CRF4\07312006\J613524A.raw

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151 <213> ORGANISM: Artificial sequence
153 <220> FEATURE:
155 <223> OTHER INFORMATION: Oligodeoxynucleotide
157 <400> SEQUENCE: 10
158 tcgtcgtttt tcggtcg 17
161 <210> SEQ ID NO: 11
162 <211> LENGTH: 16
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial sequence
166 <220> FEATURE:
168 <223> OTHER INFORMATION: Oligodeoxynucleotide
170 <400> SEQUENCE: 11
171 tcgtcgtttt tcggtc 16
174 <210> SEQ ID NO: 12
175 <211> LENGTH: 15
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial sequence
179 <220> FEATURE:
181 <223> OTHER INFORMATION: Oligodeoxynucleotide
183 <400> SEQUENCE: 12
184 tcgtcgtttt tcggt 15
187 <210> SEQ ID NO: 13
188 <211> LENGTH: 14
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial sequence
W--> 191 <220> FEATURE:
193 <223> OTHER INFORMATION: Oligodeoxynucleotide
195 <400> SEQUENCE: 13
196 tcgtcgtttt tcgg 14
199 <210> SEQ ID NO: 14
200 <211> LENGTH: 12
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial sequence
204 <220> FEATURE:
206 <223> OTHER INFORMATION: Oligodeoxynucleotide
208 <400> SEQUENCE: 14
209 tcgtcgtttt tc 12
212 <210> SEQ ID NO: 15
213 <211> LENGTH: 21
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial sequence
217 <220> FEATURE:
219 <223> OTHER INFORMATION: Oligodeoxynucleotide
221 <400> SEQUENCE: 15
222 tcgtcgtttt tcggtcgttt t 21
225 <210> SEQ ID NO: 16
226 <211> LENGTH: 20
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial sequence

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RAW SEQUENCE LISTING

DATE: 07/31/2006

PATENT APPLICATION: US/10/613,524A

TIME: 15:23:46

Input Set : A:\PTO.txt

Output Set: N:\CRF4\07312006\J613524A.raw

230 <220> FEATURE:
 232 <223> OTHER INFORMATION: Oligodeoxynucleotide
 234 <400> SEQUENCE: 16
 235 cgtcggttttt cggtcggtttt 20
 238 <210> SEQ ID NO: 17
 239 <211> LENGTH: 19
 240 <212> TYPE: DNA
 241 <213> ORGANISM: Artificial sequence
 243 <220> FEATURE:
 245 <223> OTHER INFORMATION: Oligodeoxynucleotide
 247 <400> SEQUENCE: 17
 248 gtcggtttttt gggtcggtttt 19
 251 <210> SEQ ID NO: 18
 252 <211> LENGTH: 18
 253 <212> TYPE: DNA
 254 <213> ORGANISM: Artificial sequence
 256 <220> FEATURE:
 258 <223> OTHER INFORMATION: Oligodeoxynucleotide
 260 <400> SEQUENCE: 18
 261 tcggttttttcg gtcggtttt 18
 264 <210> SEQ ID NO: 19
 265 <211> LENGTH: 17
 266 <212> TYPE: DNA
 267 <213> ORGANISM: Artificial sequence
 269 <220> FEATURE:
 271 <223> OTHER INFORMATION: Oligodeoxynucleotide
 273 <400> SEQUENCE: 19
 274 cggttttttcgg tcggtttt 17
 277 <210> SEQ ID NO: 20
 278 <211> LENGTH: 16
 279 <212> TYPE: DNA
 280 <213> ORGANISM: Artificial sequence
 282 <220> FEATURE:
 284 <223> OTHER INFORMATION: Oligodeoxynucleotide
 286 <400> SEQUENCE: 20
 287 gtttttcggt cggtttt 16
 290 <210> SEQ ID NO: 21
 291 <211> LENGTH: 15
 292 <212> TYPE: DNA
 293 <213> ORGANISM: Artificial sequence
 295 <220> FEATURE:
 297 <223> OTHER INFORMATION: Oligodeoxynucleotide
 299 <400> SEQUENCE: 21
 300 ttttttcggtc gtttt 15
 303 <210> SEQ ID NO: 22
 304 <211> LENGTH: 14
 305 <212> TYPE: DNA
 306 <213> ORGANISM: Artificial sequence
 308 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 07/31/2006

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TIME: 15:23:46

Input Set : A:\PTO.txt

Output Set: N:\CRF4\07312006\J613524A.raw

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310 <223> OTHER INFORMATION: Oligodeoxynucleotide
312 <400> SEQUENCE: 22
313 ttttcggtcg tttt 14
315 <210> SEQ ID NO: 23
316 <211> LENGTH: 13
317 <212> TYPE: DNA
318 <213> ORGANISM: Artificial sequence
320 <220> FEATURE:
322 <223> OTHER INFORMATION: Oligodeoxynucleotide
324 <400> SEQUENCE: 23
325 ttttcggtcgt ttt 13
328 <210> SEQ ID NO: 24
329 <211> LENGTH: 12
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial sequence
333 <220> FEATURE:
335 <223> OTHER INFORMATION: Oligodeoxynucleotide
337 <400> SEQUENCE: 24
338 ttcggtcgtt tt 12
341 <210> SEQ ID NO: 25
342 <211> LENGTH: 11
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial sequence
346 <220> FEATURE:
348 <223> OTHER INFORMATION: Oligodeoxynucleotide
350 <400> SEQUENCE: 25
351 tcggtcgttt t 11
354 <210> SEQ ID NO: 26
355 <211> LENGTH: 10
356 <212> TYPE: DNA
357 <213> ORGANISM: Artificial sequence
359 <220> FEATURE:
361 <223> OTHER INFORMATION: Oligodeoxynucleotide
363 <400> SEQUENCE: 26
364 cggtcgtttt 10
367 <210> SEQ ID NO: 27
368 <211> LENGTH: 13
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial sequence
372 <220> FEATURE:
374 <223> OTHER INFORMATION: Oligodeoxynucleotide
377 <400> SEQUENCE: 27
378 tcgtcgtttt tcg 13
381 <210> SEQ ID NO: 28
382 <211> LENGTH: 26
383 <212> TYPE: DNA
384 <213> ORGANISM: Artificial sequence
386 <220> FEATURE:
388 <223> OTHER INFORMATION: Oligodeoxynucleotide

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/613,524A

DATE: 07/31/2006
TIME: 15:23:47

Input Set : A:\PTO.txt
Output Set: N:\CRF4\07312006\J613524A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12

Seq#:5; N Pos. 13,14,15,16,17,18,19,20,21

Seq#:28; N Pos. 4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23

Seq#:29; N Pos. 4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,27,28

Seq#:29; N Pos. 29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46

VERIFICATION SUMMARY

DATE: 07/31/2006

PATENT APPLICATION: US/10/613,524A

TIME: 15:23:47

Input Set : A:\PTO.txt

Output Set: N:\CRF4\07312006\J613524A.raw

L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:191 M:283 W: Missing Blank Line separator, <220> field identifier
L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0

**Raw Sequence Listing before editing
(for reference only)**



IFW16

RAW SEQUENCE LISTING

DATE: 07/31/2006

PATENT APPLICATION: US/10/613,524A

TIME: 08:53:20

Input Set : A:\C1037.70042US00; Revised SEQ listing.txt

Output Set: N:\CRF4\07312006\J613524A.raw

4 <110> APPLICANT: KRIEG, ARTHUR M
 6 <120> TITLE OF INVENTION: NUCLEIC ACID COMPOSITIONS FOR STIMULATING IMMUNE RESPONSES
 8 <130> FILE REFERENCE: C1037.70042US00
 10 <140> CURRENT APPLICATION NUMBER: US 10/613,524A
 11 <141> CURRENT FILING DATE: 2003-07-03
 13 <150> PRIOR APPLICATION NUMBER: US 60/394,091
 14 <151> PRIOR FILING DATE: 2002-07-03
 16 <160> NUMBER OF SEQ ID NOS: 29
 18 <170> SOFTWARE: PatentIn version 3.2

ERRORED SEQUENCES

367 <210> SEQ ID NO: 27
 368 <211> LENGTH: 13
 369 <212> TYPE: DNA
 370 <213> ORGANISM: Artificial sequence
 372 <220> FEATURE:
 374 <223> OTHER INFORMATION: Oligodeoxynucleotide
 377 <400> SEQUENCE: 27
 E--> 378 tcgtcgtttt tcg *13 ← insert*
 381 <210> SEQ ID NO: 28
 382 <211> LENGTH: 26
 383 <212> TYPE: DNA
 384 <213> ORGANISM: Artificial sequence
 386 <220> FEATURE:
 388 <223> OTHER INFORMATION: Oligodeoxynucleotide
 391 <220> FEATURE:
 392 <221> NAME/KEY: misc_feature
 393 <222> LOCATION: (4)..(23)
 394 <223> OTHER INFORMATION: n is a, c, g, or t; and any 0-20 may be absent
 396 <400> SEQUENCE: 28
 E--> 397 gggnnnnnnnn nnnnnnnnnn nnnnggg *26 ←*
 400 <210> SEQ ID NO: 29
 401 <211> LENGTH: 49
 402 <212> TYPE: DNA
 403 <213> ORGANISM: Artificial sequence
 405 <220> FEATURE:
 407 <223> OTHER INFORMATION: Oligodeoxynucleotide
 410 <220> FEATURE:
 411 <221> NAME/KEY: misc_feature
 412 <222> LOCATION: (4)..(23)
 413 <223> OTHER INFORMATION: n is a, c, g, or t; and any 0-20 may be absent

pp1-2

**Does Not Comply
Corrected Diskette Needed**

RAW SEQUENCE LISTING

DATE: 07/31/2006

PATENT APPLICATION: US/10/613,524A

TIME: 08:53:20

Input Set : A:\C1037.70042US00; Revised SEQ listing.txt

Output Set: N:\CRF4\07312006\J613524A.raw

415 <220> FEATURE:

416 <221> NAME/KEY: misc_feature

417 <222> LOCATION: (27)..(46)

418 <223> OTHER INFORMATION: n is a, c, g, or t; and any 0-20 may be absent

421 <400> SEQUENCE: 29

E--> 422 gggnnnnnnnn nnnnnnnnnn nnngggnnnn nnnnnnnnnn nnnnnnggg

495

VERIFICATION SUMMARY

DATE: 07/31/2006

PATENT APPLICATION: US/10/613,524A

TIME: 08:53:21

Input Set : A:\C1037.70042US00; Revised SEQ listing.txt

Output Set: N:\CRF4\07312006\J613524A.raw

L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:191 M:283 W: Missing Blank Line separator, <220> field identifier
L:378 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:13 SEQ:27
L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:397 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:26 SEQ:28
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:422 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:49 SEQ:29